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EXAMINER				
DAYE, CHELCIE L				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary****Application No.**

09/921,057

**Applicant(s)**

ASMUSSEN ET AL.

**Examiner**

CHELCIE DAYE

**Art Unit**

2161

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 April 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11, 21-34 and 36-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11, 21-34 and 36-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SD-102)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date 4/19/10

### **DETAILED ACTION**

1. This action is issued in response to applicant's amendment filed April 19, 2010.
2. Claims 1-11 and 21-38 are presented. Claims 37-38 are added and claims 12-20 and 35 are cancelled.
3. Claims 1-11, 21-34, and 36-38 are pending.
4. Applicant's arguments filed April 19, 2010, have been fully considered but they are not persuasive.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 1, 21, 34, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Balogh (US Patent No. 5,493,677) filed June 8, 1994, in view of Dudkiewicz (US Patent No. 6,651,253) filed November 16, 2001; Provisional November 16, 2000, further in view of Bowman (US Patent No. 6,006,225) filed September 1, 1998.**

Regarding Claims 1, 21, and 36, Balogh discloses an apparatus,  
comprising:

a content metadata crawler configured to search metadata related to content and to produce a metadata list based on the search (column 3, lines 2-10 and column 10, lines 22-28, Balogh), wherein the metadata list comprises a plurality of metadata elements (Fig.3, item 262, Balogh),

a suggestion keyword indexer coupled to the content metadata crawler, wherein the suggestion keyword indexer is configured to receive the metadata list and index the metadata elements (Fig.6; columns 8-9, lines 64-67 and 1-9, respectively, Balogh);

a suggestion database coupled to the suggestion keyword indexer and configured to store the indexed metadata elements (column 9, lines 9-14, Balogh); and

a suggestion database processor coupled to the content metadata crawler, the suggestion keyword indexer and the suggestion keyword database (column 4, lines 14-22, Balogh).

However, Balogh is not as detailed with respect to the content being aggregated from the plurality of media sources and the suggestion database processor configured to search the suggestion database, based on one or more search request criteria, to produce a list of keywords.

On the other hand, Dudkiewicz discloses the content is being aggregated from the plurality of media sources (column 14, lines 39-67, Dudkiewicz)<sup>1</sup> and the suggestion database processor configured to receive one or more search

request criteria, to produce a list of keywords (column 12-13, lines 39-67 and 1-8, respectively, Dudkiewicz). Balogh and Dudkiewicz are analogous art because they are from the same field of endeavor of the identification of programming events of interest to a viewer. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Dudkiewicz's teachings into the Balogh system. A skilled artisan would have been motivated to combine as suggested by Dudkiewicz at column 3, lines 47-56, in order to producing evaluations which reflect an actual users preferences more accurately, and further matching and ranking programs based on viewer preferences. As a result, provide intelligence in receiving and recording devices for identifying programs of interest on behalf of the user.

However, Balogh and Dudkiewicz are not as detailed with respect to modifying the one or more search criteria with the produced list of keywords.

On the other hand, Bowman discloses modifying the one or more search criteria with the produced list of keywords (column 3, lines 6-13, Bowman)<sup>2</sup>. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Bowman's teachings into the Balogh and Dudkiewicz system. A skilled artisan would have been motivated to combine in order to more quickly and efficiently locate the most relevant content.

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<sup>1</sup> Examiner Notes: The plurality of media sources corresponds to video, television, and personal digital assistants (i.e. PDA's). Other media sources are also found at cols. 30-31, lines 65-67 and 1-5; respectively, wherein the audio programs and electronic print are examples.

<sup>2</sup> Examiner Notes: A more detailed example can be found at col. 7, lines 14-33, Bowman.

Therefore, the combination of Balogh in view of Dudkiewicz, further in view of Bowman, disclose to initiate a search of the suggestion database using the modified one or more search request criteria in response to receiving the one or more search request criteria (columns 13-14, lines 63-67 and 1-12, respectively, Bowman).

Regarding Claim 34, the combination of Balogh in view of Dudkiewicz, further in view of Bowman, disclose the apparatus further comprising a search request processor configured to perform the search of the suggestion database using the modified one or more search request criteria (column 1, lines 54-60 and column 3, lines 6-13, Bowman).

Regarding Claim 38, the combination of Balogh in view of Dudkiewicz, further in view of Bowman, disclose the apparatus wherein the suggestion database processor is configured to modify the one or more search request criteria by appending the produced list of keywords to the received one or more search request criteria (column 13, lines 1-10, Bowman).

**7. Claims 2-3, 5-11, 22-23, and 26-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Balogh (US Patent No. 5,493,677) filed June 8, 1994, in view of Dudkiewicz (US Patent No. 6,651,253) filed November 16, 2001; Provisional November 16, 2000, further in view of Bowman (US Patent No.**

**6,006,225) filed September 1, 1998, and further in view of Cappi (US Patent Application No. 20020038308) filed May 27, 1999.**

Regarding Claims 2 and 22, the combination of Balogh in view of Dudkiewicz, further in view of Bowman, disclose the apparatus wherein each metadata element comprises one or more metadata fields (Fig.3, Balogh), and wherein the suggestion keyword indexer, comprises:

an extraction module configured to extract and cache a value of each metadata field (column 9, lines 25-33, Dudkiewicz);

a parsing module coupled to the extraction module and configured to parse contents of uniquely identifying metadata fields (column 9, lines 1-8 and column 10, lines 46-55, Dudkiewicz), wherein the contents of a uniquely identifying field comprises one or more word items (column 12, lines 33-37, Balogh);

a classifying module coupled to the parsing module and configured to classify one or more of the one or more word items (column 11, lines 11-39, Dudkiewicz); and

a comparison module coupled to the classifying module and configured to compare one or more of the one or more word items to determine a list of related terms (columns 11-12, lines 40-67 and 1-8, respectively, Dudkiewicz). However, the combination of Balogh in view of Dudkiewicz, further in view of Bowman, are not as detailed with respect to an index matrix record builder configured to create

and augment an index matrix record for each of the classified word items. On the other hand, Cappi discloses an index matrix record builder configured to create and augment an index matrix record for each of the classified word items ([0058-0059], lines 1-6 and 1-10, respectively, Cappi). Balogh in view of Dudkiewicz, further in view of Bowman, and further in view of Cappi, are analogous art because they are from the same field of endeavor of database integration. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Cappi's teachings into the Balogh in view of Dudkiewicz, further in view of Bowman, system. A skilled artisan would have been motivated to combine as suggested by Cappi at [0009], lines 1-15, in order to logically integrating databases onto a global data dictionary so a user can conduct searches and retrieve data that corresponds to a data element needed. As a result, providing the most relevant information to the user first.

Regarding Claims 3 and 23, the combination of Balogh in view of Dudkiewicz, further in view of Bowman, and further in view of Cappi, disclose the apparatus further comprising one or more of a dictionary database, a thesaurus database and a lexicon database ([0034], lines 1-9, Cappi), wherein the comparison module is configured to compare a word item to entries in one or more of the dictionary database, the thesaurus database and the lexicon database, and ([0042], lines 1-12, Cappi) wherein the list of related terms



includes one or more of a dictionary definition, lexicon data, and one or more synonyms ([0059-0062], lines 1-10, 1-6, 1-12, and 1-10, respectively, Cappi).

Regarding Claims 5 and 26, the combination of Balogh in view of Dudkiewicz, further in view of Bowman, and further in view of Cappi, disclose the apparatus wherein the uniquely identifying fields comprise one or more of content type, content title, date of production, rating and parental notice information, performer, artist, writer, author, plot summary, keyword list, and textual content description (Fig.7; columns 10-11, lines 46-67 and 1-10, respectively, Dudkiewicz).

Regarding Claims 6 and 27, the combination of Balogh in view of Dudkiewicz, further in view of Bowman, and further in view of Cappi, disclose the apparatus wherein the index matrix record builder comprises a vector assignment module that is configured to assign a word item vector value for a word item, wherein the word item vector value is a measure of similarity between a word item and a related term ([0103], lines 1-15, Cappi).

Regarding Claims 7 and 28, the combination of Balogh in view of Dudkiewicz, further in view of Bowman, and further in view of Cappi, disclose the apparatus wherein the suggestion database processor, comprises:

a vector determination module configured to assign a search term suggestion vector range to one or more of the search request criteria (columns 11-12, lines 65-67 and 1-8, Dudkiewicz); and

a vector value comparator configured to compare a vector value of a search term and the word item vector value to determine if the word item vector value falls within the suggestion vector range of the search term (column 12, lines 9-38, Dudkiewicz), wherein word items that fall within the suggestion vector range may be used to search for suggested content (column 16, lines 6-24, Dudkiewicz).

Regarding Claims 8 and 29, the combination of Balogh in view of Dudkiewicz, further in view of Bowman, and further in view of Cappi, disclose the apparatus wherein the suggestion vector range is adjustable by a user of the apparatus (columns 14-15, lines 60-67 and 1-9, Balogh).

Regarding Claims 9, 30, and 31, the combination of Balogh in view of Dudkiewicz, further in view of Bowman, and further in view of Cappi, disclose the apparatus further comprising a user-defined filter, the user-defined filter comprising:

- a user history filter (column 17, lines 25-27, Dudkiewicz);
- a user profile filter (column 17, lines 19-25, Dudkiewicz); and

an approved content access filter, wherein the suggestion database processor is configured to process search results from the suggestion database using the user-defined filter to produce the list of suggested content (column 14, lines 8-17, Dudkiewicz).

Regarding Claims 10 and 32, the combination of Balogh in view of Dudkiewicz, further in view of Bowman, and further in view of Cappi, disclose the apparatus further comprising a ranking module configured to rank content in the list of suggested content (columns 22-23, lines 65-67 and 1-16, Dudkiewicz).

Regarding Claims 11 and 33, the combination of Balogh in view of Dudkiewicz, further in view of Bowman, and further in view of Cappi, disclose the apparatus wherein the ranking module is configured to rank the content according to one or more of a user historical analysis report and similarities to previously accessed content by the user (column 30, lines 24-55, Dudkiewicz).

Regarding Claim 37, the combination of Balogh in view of Dudkiewicz, further in view of Bowman, and further in view of Cappi, disclose the apparatus wherein the suggestion keyword indexer comprises:

a record builder configured to generate records that associate a suggestion keyword with a metadata element (column 1, lines 57-64, Balogh)

and a vector quantity that indicates a degree of similarity between the suggestion keyword and the metadata element ([0096-0097], Cappi); and

wherein the suggestion database processor comprises: a comparator configured to compare the vector quantity associated with a suggestion keyword with a suggestion vector range, wherein the suggestion keywords whose vector quantities fall within the suggestion vector range are included in the produced list of keywords ([0103-0104], Cappi).

**8. Claims 4, 24, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Balogh (US Patent No. 5,493,677) filed June 8, 1994, in view of Dudkiewicz (US Patent No. 6,651,253) filed November 16, 2001; Provisional November 16, 2000, further in view of Bowman (US Patent No. 6,006,225) filed September 1, 1998, further in view of Cappi (US Patent Application No. 20020038308) filed May 27, 1999, and further in view of Karaali (US Patent No. 6,182,028) filed November 7, 1997.**

Regarding Claims 4, 24, and 25, the combination of Balogh in view of Dudkiewicz, further in view of Bowman, and further in view of Cappi, disclose the apparatus wherein the classifying module comprises one or more computational linguistics tools (column 12, lines 57-64, Balogh), wherein the one or more computational linguistic tools are configured to determine part-of-speech data of a word item (column 8, lines 1-22, Balogh), and wherein the index matrix record

builder is configured to add the part-of-speech data to the index matrix record for the word item (column 6, lines 6-27, Balogh). However, the combination of Balogh in view of Dudkiewicz, further in view of Bowman, and further in view of Cappi, are silent with respect to the linguistic tool including a rule-based part-of-speech tagging algorithm and a stochastic part-of-speech tagging algorithm. On the other hand, Karaali discloses the linguistic tool including a rule-based part-of-speech tagging algorithm and a stochastic part-of-speech tagging algorithm (column 3, lines 3-14, Karaali). Balogh in view of Dudkiewicz, further in view of Bowman, further in view of Cappi, and further in view of Karaali are analogous art because they are from the same field of endeavor of relating part-of-speech. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Karaali's teachings into the Balogh in view of Dudkiewicz, further in view of Bowman, and further in view of Cappi system. A skilled artisan would have been motivated to combine as suggested by Karaali at column 1, lines 11-21, in order to assign the correct part of speech to each word in a sentence, based on the word's usage. As a result, disclosing the accurate recognition of text.

### ***Response to Arguments***

**Applicant argues, Bowman does not teach the newly added limitation of "initiate a search of the suggestion database using the modified one or more**

**search request criteria in response to receiving the one or more search request criteria".**

Examiner respectfully disagrees. Bowman teaches wherein the related terms are presented through links which combine with the original query terms and a respective related term. Once the user clicks on the appropriate link, the modified query is submitted to the search engine and produces the results (see cols. 13-14, lines 63-67 and 1-12). Therefore disclosing the above-argued feature.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action.

Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

***Points of Contact***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHELCIE DAYE whose telephone number is (571) 272-3891. The examiner can normally be reached on M-F, 7:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Apu Mofiz can be reached on 571-272-4080. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chelcie Daye  
Patent Examiner  
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June 30, 2010

/Etienne P LeRoux/  
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